In the claims:

Amend the following claims:

1. A system for treating serious infections and sepsis caused by infections by withdrawing blood from a patient, passing the withdrawn blood through a particulate hemocompatible polymer material for removing toxins, and returning the blood from which the toxins have been removed back to the patient, the system comprising the particulate hemocompatible material which includes a first group of macroporous particles which are hydrophobic and positively charged so as to provide adherence of endotoxin to an inner surface of particles of the first group, and also a second group of mesoporous particles which are hydrophobic and are not charged and have a pore size selected so that cytokines and superantigens adhere to an inner surface of the particles of the second group so as to simultaneously purify blood from endotoxins, cytokines and superantigens and thereby to treat serious infections and sepsis.

3. A system as defined in claim 1, wherein said particles are [particles selected from the group consisting of] beads [and fibers].

Amended claim:

1. A system for treating serious infections and sepsis caused by infections by withdrawing blood from a patient, passing the withdrawn blood through a particulate hemocompatible polymer material for removing toxins, and returning the blood from which the toxins have been removed back to the patient, the system comprising the particulate hemocompatible material which includes a first group of macroporous particles which are hydrophobic and positively charged so as to provide adherence of endotoxin to an inner surface of particles of the first group, and also a second group of mesoporous particles which are hydrophobic and are not charged and have a pore size selected so that cytokines and superantigens adhere to an inner surface of the particles of the second group so as to simultaneously purify blood from endotoxins, cytokines and superantigens and thereby to treat serious infections and sepsis.

3. A system as defined in claim 1, wherein said particles are beads.